Description

BACKGROUND OF THE INVENTION

1. Field of Invention

The present invention relates to an access assembly for a container. In particular, the invention relates to an access member pivotally mounted to an opening in a trash receptacle. The access member includes a handle adapted for engagement by a user, such that the access member may be disposed to a first open position. The access member also includes a counterweight member of sufficient weight to counterbalance the combined weight of the access member and the handle. The counterweight is so sized and positioned that the access member, having been engaged by a user and disposed to an open position, will automatically return to a second closed position and remain there. The invention facilitates the opening and closing of an opening in a trash receptacle through which waste material passes, in such manner that the waste material and attendant odors remain in the receptacle.

2. Description of the Prior Art

Prior to the middle of the twentieth century, most service-oriented businesses in the United States and elsewhere, for example service stations, retail stores of all kinds, and eating establishments, were labor intensive. In practical terms, this meant that patrons of such businesses enjoyed prompt attention from, depending upon the nature of the business, salespersons and other attendants of various sorts. Such personnel were generally employees of the business concerned, so that their salaries and benefits represented expenses to their employers. This, in turn, meant that the profitability of such businesses was often impacted negatively by such expenditures, thereby providing business owners with an incentive to eliminate from their payrolls employees perceived to be unnecessary, such as salespersons, waiters and waitresses, busboys, service station attendants, and the like. The business owner found the answer to this dilemma in the person of the customer herself. The customer, it was found, would not only continue to pay for the services provided by the business owner, but also perform the duties of the departed former employee, at no cost to the business owner. It is for this reason that the commercial world is populated by service stations at which the customer pumps his own gasoline, retail stores in which salespersons are not to be found, grocery stores in which one acts as one's own "checker", and dining establishments in which the customer cleans her own table.

Regrettably, the circumstances above described are not always to the benefit of the consumer. For example, in limited service restaurants, and particularly in franchised fast food establishments, the patron discards his own trash into receptacles throughout the store. Generally, these receptacles have pivotally mounted access members through

which waste material of all kinds may be passed by the customer. Even though various types of handle assemblies long have been available for mounting to trash receptacle access members, most limited service restaurants continue to utilize trash receptacles having access members either without handles or with handles that are dysfunctional, with the result that the opening in the receptacle is not properly closed by the access member. This state of affairs often has very undesirable consequences, including unpleasant odors that permeate the establishment, as well as unsightly and unsanitary spillages of waste material on the establishment floor. A particularly disagreeable such consequence is that because of the inadequate or dysfunctional access member, the customer may actually come into physical contact with waste material in, on or near the trash receptacle when attempting to place discarded items in the receptacle. In order to avoid such unpleasant and unsanitary conditions, there is a need for a more efficient type of access assembly which allows the patron to open the access member without direct contact with waste material, and allows for the access member to return to its starting position on its own accord, thereby retaining the garbage and odor within the receptacle.

Attempts in the prior art to address this need are portrayed by structures disclosed in the following United States patents.

The patent to Lyons, U.S. Patent No. 6,267,260, discloses a trash container door opening apparatus including means to enable a user to open the trash container access member with one hand by using a hand-operated lever or a foot-operated pedal. This apparatus, however, is problematic because it contains no means or structure to ensure that the access member returns to its starting position. As a result, the trash container

opening is not closed, so that the need to prevent the unsanitary and unpleasant problems created by spilled waste material and foul odors is not satisfied.

The patent to Betancourt, U.S. Patent No. 5,398,374, discloses a trash bin opening access assembly configured to allow a user's hand to be positioned away from direct contact with any trash or garbage being passed into the trash receptacle. The access assembly does not provide a mechanism to allow the access member to return to its starting position, thereby failing to seal the trash receptacle so that unsightly waste material and odors are retained with it.

While the structures disclosed in the above-referenced patents attempt to address the problem of unsanitary conditions and unpleasant odors created by improperly sealed trash receptacles, they do not fully accomplish their purpose. Although the structures disclosed in the '374 and '260 patents may allow users to avoid contact with refuse, they do not prevent unsanitary waste materials and odors from escaping from the receptacle, since those structures do not provide any means for completely closing the trash receptacle access opening.

SUMMARY OF THE INVENTION

The present invention is directed to an access assembly for a container, and in particular for a trash receptacle. The access assembly includes an access member pivotally attached to an opening in a trash receptacle. The access member has a handle and a counterweight, which are attached to the respective exterior and interior surfaces thereof. The handle is tubular in form and positioned so that a user may pull up on the handle allowing the access member to open outward. Then, upon release of the handle by the user, the counterweight will force the access member to a fully closed position. The disposition of the handle and counterweight allow for a user to deposit waste material into a trash receptacle and avoid contact with similar material already residing therein, and also ensures that the access member will return to its fully close position, thus keeping garbage and odors contained within the receptacle.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a frontal view of the entire trash receptacle, including the handle.

FIG. 2 is an enlarged view of the handle and its components.

FIG. 3 is an enlarged view of the counterweight attachment placed on the interior side of the access member of the trash receptacle.

FIG. 4 is an enlarged view of the counterweight attachment and its components.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

As illustrated in the accompanying FIG. 1, the present invention relates to an access assembly 28 attached to or forming an integral portion of a trash receptacle 1. The trash receptacle 1 includes a hollow interior 2 into which waste material is passed through an access opening 27. An access member 3 is pivotally attached to the trash receptacle 1 such that the access member 3 rotates about an upper peripheral edge 4 of the access member 3. The access member 3 may be pivotally mounted to the trash receptacle 1 along the upper peripheral edge 4 by any appropriate means, including hinges (not shown).

With further reference to FIG. 1, the access assembly 28 includes a handle 5. The handle 5 is adapted to be pulled outward and upward, which serves to pivot the access member 3 upward out of its closed position relative to the access opening 27. With the access member 3 thus disposed into its open position, the user may cast the waste material into the interior 2 of the trash receptacle 1.

Turning now to FIG. 2, the handle 5 includes a tubular member 11. In the preferred embodiment, the tubular member 11 is composed of eighteen (18) gauge stainless steel, and is fourteen (14) inches in length and one (1) inch in diameter, but may be adapted to any suitable size and length. The handle 5 is attached to an external side 30 of the access member 3. In the preferred embodiment, the handle 5 is positioned approximately 1 inch from a bottom edge 32 of said access member 3, and is offset 2 inches at each vertical side 6 of the access member 3. The handle 5 is attached to the access member 3 by means of a plurality of mounting plates 7. The mounting plates 7 are secured to the access member 3 by means of a plurality of fasteners 8, which are fitted

through a plurality of openings 10 in the mounting plates 7. The mounting plates 7 are protected by corresponding mounting plate covers 9.

Referring now to FIGS. 3 and 4, a counterweight 19 is shown. The counterweight 19 is positioned on an interior side 34 of the access member 3 and is horizontally centered thereon. In the preferred embodiment, the counterweight 19 is disposed one (1) inch from an upper edge 4 of the access member 3, and is constructed of A36 steel stock. The counterweight 19, as illustrated in FIG. 4, has a length dimension 20 of nine and three-quarters (9 ¾) inches, a width dimension 21 of two and one-half (2 ½) inches and a thickness 22 of one-half (½) inch. The counterweight 19 has a plurality of openings 23. The openings 23 are adapted to receive fasteners (not shown) for attaching the counterweight 19 to the interior side 34 of the access member 3.

After the handle 5 and the counterweight 19 are properly positioned on the access member 3, and the access member 3 has been properly attached to the trash receptacle 1, the access assembly 28 is ready for use. In use, the user exerts force on the access assembly 28 by pulling upwardly on the handle 5, thereby causing the access member 3 to be opened outwardly and allowing the user to pass waste material into the trash receptacle 1. Upon release of the handle 5 by the user, the counterweight 19 causes the access member 3 to return to its vertical starting position, thereby closing the access opening 27 of the trash receptacle 1

The embodiments of the access assembly described above are the preferred embodiments of the access assembly, however, the invention is not intended to be limited to these embodiments.